

Title (en)

RAPID NUCLEIC ACID EXTRACTION METHOD AND APPARATUS

Title (de)

SCHNELLE NUKLEINSÄUREEXTRAKTIONSVERFAHREN UND VORRICHTUNG

Title (fr)

PROCÉDÉ ET APPAREIL D'EXTRACTION RAPIDE D'ACIDE NUCLÉIQUE

Publication

EP 3323891 A1 20180523 (EN)

Application

EP 17210968 A 20150821

Priority

- US 201414517527 A 20141017
- EP 15182079 A 20150821

Abstract (en)

A syringe device having a plunger beneath which is disposed a rupturable capsule containing a nucleic acid wash buffer and a rupturing mechanism for rupturing the capsule, wherein the capsule, syringe, plunger, and rupturing mechanism are so configured as to first apply pneumatic pressure to force a nucleic acid solution through a membrane and to thereafter rupture the capsule and force a first volume of the wash buffer through the membrane.

IPC 8 full level

C12N 15/10 (2006.01); **B01L 3/00** (2006.01)

CPC (source: EP US)

B01L 3/502 (2013.01 - EP US); **B01L 3/523** (2013.01 - EP US); **C12N 15/1017** (2013.01 - US); **C12Q 1/6806** (2013.01 - US); **B01L 2300/047** (2013.01 - EP US); **B01L 2300/0672** (2013.01 - EP US); **B01L 2400/0478** (2013.01 - EP US)

Citation (search report)

- [I] WO 9732645 A1 19970912 - AKZO NOBEL NV [NL], et al
- [A] WO 2005093053 A1 20051006 - FUJI PHOTO FILM CO LTD [JP], et al
- [A] WO 2005012521 A1 20050210 - DNA RES INNOVATIONS LTD [GB], et al
- [A] US 2004245163 A1 20041209 - LIM GARY [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 9145581 B1 20150929; CN 105524915 A 20160427; DK 3009510 T3 20180129; EP 3009510 A1 20160420; EP 3009510 B1 20180103; EP 3323891 A1 20180523; ES 2657370 T3 20180305; HK 1223651 A1 20170804; JP 2016093173 A 20160526; JP 6148708 B2 20170614; KR 101954218 B1 20190305; KR 20160045560 A 20160427; US 2016108393 A1 20160421; US 9738889 B2 20170822

DOCDB simple family (application)

US 201414517527 A 20141017; CN 201510540842 A 20150828; DK 15182079 T 20150821; EP 15182079 A 20150821; EP 17210968 A 20150821; ES 15182079 T 20150821; HK 16111871 A 20161014; JP 2015205669 A 20151019; KR 20150119668 A 20150825; US 201514830210 A 20150819